M Street Bridge
Spanning Rock Creek and Potomac Parkway
Washington
District of Columbia

HAER No. DC-37

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
U.S. Department of the Interior
Washington, DC 20013-7127

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HISTORIC AMERICAN ENGINEERING RECORD

M STREET BRIDGE
HAER DC-37

Location: Spanning the Rock Creek and Potomac Parkway and Rock Creek at M Street, between 26th and 28th streets, in the northwest quadrant of Washington, D.C.

Dates of Construction: 1929-30

Engineer: David V. McComb, D.C. Bridge Division

Builder: Farris Engineering Company, Pittsburgh

Owner: D.C. Department of Public Works

Present Use: Vehicular bridge

Significance: M Street Bridge spans Rock Creek valley at the site of the oldest bridge in the District of Columbia. Although representative of mid twentieth-century bridge architecture in the United States, the appearance of the fifth and present M Street Bridge conflicted with architectural aesthetics for park-structure design established by the Commission of Fine Arts, and it was erected without that organization's approval. It is the only non-arch bridge crossing Rock Creek and Potomac Parkway.

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This HAER report was assembled from an historic structure report for M Street Bridge prepared in 1991-92 by Traceries, a Washington, D.C.-based research and consulting firm. Architectural historians Laura Harris Hughes and Kimberly Prothro Williams conducted the primary research.

For additional information, see the historical context for HABS No. DC-697, Rock Creek and Potomac Parkway, which was undertaken as a two-year pilot project to help establish standards and guidelines for recording the structures and landscape features of park roads and parkways. This project was a joint effort of the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER), a combined division of the National Park Service. The project was sponsored by the Park Roads Program of the National Park Service, John Gingles, deputy chief, Safety Services Division. The project supervisor was Sara Amy Leach, HABS historian.

History of the Crossing

Although it is now one of several bridges that cross Rock Creek and the Rock Creek and Potomac Parkway, M Street Bridge is located on the site of the first bridge to cross the creek valley. Originating near Laytonsville in Montgomery County, Maryland, approximately 16 miles north of Washington, D.C., Rock Creek meanders south through rolling hills to the District of Columbia. Just south of the District line, the stream valley begins to slope steeply and the creek cuts through narrow and rocky ravines until it flattens out and the creek spills into the Potomac River. As the City of Washington and its population grew beyond the bounds of the Federal City and came to encompass Georgetown, the steep Rock Creek valley became an obstacle to the development of the northwestern portion of the District. The bridges being constructed across the valley in the mid to late nineteenth century were generally steel-deck trusses typical of the period.

Segments of Rock Creek and Potomac Parkway were under construction in the mid 1920s, but because of unacquired land and other problems, the road was not completed until 1936. The development of the parkway to carry motorized vehicles demanded the construction of new and larger bridges with sufficient vertical and horizontal clearances, which began to replace the nineteenth-century bridges erected to simply extend the city's street grid over the valley. Early twentieth-century replacement bridges--such as that proposed for Massachusetts Avenue (1901), Connecticut Avenue (1907), and Q Street (1914)--followed certain design aesthetics endorsed by the Commission of Fine Arts, created in 1910 to advise the government on matters pertaining to the arts and to guide the architectural development of Washington.

The earliest crossings of Rock Creek were fords navigable only at low tide, or light wood drawbridge structures. Poor construction and faulty structural systems caused many of these bridges to wash away in storms or be condemned. M Street and K Street bridges were the two oldest spans built across the valley, in 1788 and 1792, respectively. According to an early account of the city:

> There are two bridges. That nearest the mouth had three arches, is a 135' in length, and 36' in breadth. The other at a distance of 650 yards, is supported hy piles, 280' long, and 18' wide.[1]

The first M Street Bridge, a wood span over Rock Creek on axis with the present M Street[2], was the only bridge to traverse Rock Creek valley at the time, *and* it was the first bridge built in Washington, D.C. It was constructed by the city of Georgetown in 1788, two years before Congress founded the Federal City. According to local lore, this bridge gave out one night during a severe storm. A stagecoach was supposedly crossing over it, and the driver and his four horses drowned, leading residents to contend for years that on stormy nights a stagecoach pulled by four horses could be seen in the mist attempting to cross the bridge.[3]

Following the destruction of this bridge, in 1800 a second M Street Bridge was built by the District Commissioners for $2,200. The cost of construction was divided three ways: Congress

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[1] Warden, D. B., Description of the District of Columbia (Paris: Smith, 1816), p. 100.

[2] Kathryn Schneider Smith, Port Town to Urban Neighborhood: Georgetown Waterfront of Washington, D.C. 1880-1920 (Dubuque, Iowa: Kendall/Hunt Publishing Co., 1989), p. 30. The eastern part of M Street in Georgetown was originally called Bridge Street because it led to the original M Street Bridge.

[3] Zack Spratt, "Rock Creek's Bridges," Records of the Columbia Historical Society, vol. 53-56 (1959), p. 101-02.

appropriated $1,000 toward it, Georgetown paid $700, and the District of Columbia contributed $500. A drawbridge, this span of heavy timbers measured 300' long and 18' wide; the central draw allowed sailing vessels to ascend Rock Creek. Although Rock Creek is very rocky and shallow today, in the eighteenth and nineteenth centuries its lower reaches were wide enough for trading vessels. Ships carrying tobacco and other goods from Maryland and Virginia went up the creek to the wharves and warehouses of Georgetown. Thomas Corcoran observed in 1788, for instance, a small brig from Amsterdam being loaded with tobacco from a warehouse on Rock Creek, above M Street.[4] Gradually, however, siltation from upstream agriculture and construction activities constricted the creek. In the 1830s, construction of a quay across Rock Creek at its juncture with the Potomac River rendered it virtually unnavigable.[5]

In 1839, Major William Turnbull prepared drawings for a third M Street bridge--a single arch of stone measuring a "load of hay" wide and a "load of hay" high--accompanied by a justification for costly estimate for construction, in excess of $38,000[6]:

> This may at first, appear too great to you, but for a permanent structure and considering that the nature of the foundations have not been accurately ascertained, I think it rather a low than too high an estimate. . . The span of the arch may also appear to you, as too great, but the margin of the arch is an alluvial deposit and if the arch were shortened, the depth of the foundation would he increased and necessarily the cost. . .[7]

A covered wood bridge, and the third span, was subsequently erected here ca. 1839, in lieu of Turnbull's proposal.

This structure was superseded in 1871 by a light steel-truss bridge consistent with other mid to late nineteenth-century bridges in the park. The fourth M Street Bridge at this location, it was 127' long, 42' wide, and 28' high. Condemned as structurally unsafe, it was closed May 18, 1925, and traffic bound for Georgetown was rerouted to Key and Chain bridges, or diverted to the Pennsylvania Avenue Bridge via 26th Street, N.W.[8]

The Designers of the Present Bridge

David V. McComb, D.C. engineer of bridges for sixteen years, worked on the development and planning of bridges, sewers, and waterway systems. He was the fourth person to hold this post, in an agency established in 1892 and abolished in 1953. McComb was responsible for structural inspections, preparation of contract plans, and the supervision of bridge construction for the government of the District of Columbia. Most bridges constructed during his tenure were designed by the municipal architect or a local architect in private practice. The M Street Bridge is one of the only bridges constructed solely by McComb and his division without the direction of an outside

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[4] Spratt, p. 102.

[5] William Bushong and Piera M. Weiss, "Rock Creek Park," Magazine of the Historical Society of Washington (Fall/Winter 1990-91), p.9.

[6] Drawing of proposed masonry arched bridge for M Street, 1839. National Archives, Record Group 77.

[7] Letter from Major William Turnbull to B. Clements, Esquire, November 8, 1839. National Archives, Cartographic Division, Record Group 77.

[8] "Chronicler's Report for 1925," Columbia Historical Society Records, vol. 29-30 (1925), p. 411.

architect. Within the bridge division there were three designers who helped in supervising construction operations. McComb was responsible for many notable projects in Washington: planning the Eleventh Street Bridge over Eastern Branch; condemning the old wood C&O Canal aqueduct across the Potomac; and adopting concrete in place of brick and stone slabs for sewers and drains.[9] He attended the Massachusetts Institute of Technology. He worked in Havana, Cuba, as chief engineer of sewer and paving work, 1908-12, and assisted in the construction of the Panama Canal. McComb's affiliation with the District began in the sewer department, where he advanced to superintendent. He became the engineer for bridges in 1913.

Albert L. Harris, municipal architect, had a prolific career in the District of Columbia. He began as an architect apprentice in the Chicago offices of Henry Ives Cobb before moving to Washington to work for the prestigious firm Hornblower and Marshall. During his eleven years there, he was the chief designer. Harris was a professor of architecture at George Washington University from 1912-33, and concurrently a professor at Catholic University from 1914-21. Some of his most recognized designs are for the Army-Navy Club Building and Corcoran Hall on the George Washington University Campus (with Arthur B. Heaton). Harris served as the municipal architect from 1921 until his death in 1933. Typically, the construction of bridges over Rock Creek were designed by the municipal architect or were awarded by competition to a private architect who worked in consultation with him. The engineer of bridges usually directed the construction of the bridge, working concurrently with the municipal architect or other design architect. Harris was municipal architect when the Commission of Fine Arts requested designs for an arch bridge design for M Street, which they approved as more appropriate for a park crossing. Neither the general records of the office of the D.C. municipal architect, nor Harris's drawings for M Street Bridge could be located; the records and drawings of individual architects who worked in this post during their career are located at repositories throughout the city.

Ferris Construction Company contracted with three companies for the fabrication of M Street Bridge. The American Bridge Company, a Pittsburgh subsidiary of U.S. Steel from 1904-35 was a highly regarded firm involved in fabricating and erecting steel structures of all classes, including barges, turntables, transmission towers, electric (Heroult) furnaces--and particularly bridges and buildings.[10]

The Pittsburgh and Des Moines Steel Company were responsible for the manufacture and supply of structural steel for M Street Bridge. It operated in the Pittsburgh area from 1914-35, making and building watertowers, steel tanks, and structural steel.

The Carlem Engineering Company provided additional drawings and engineering services to the Ferris Company. It operated in Pittsburgh from 1924-30 as a steel fabricator and manufacturer of concrete bar, steel sash, and wire mesh.

History of Present Bridge

After it closed the 1871 span, the Office of Public Buildings and Public Parks spoke of dismantling the bridge and erecting a new one at N Street. The Georgetown Citizens Association and the West End Citizens Association protested the move, asserting that a bridge at N Street would direct

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[9] "David E. McComb is Taken by Death," [Washington] Evening Star, January 28, 1929.

[10] Pittsburgh, Pennsylvania, city directories, 1904-35.

traffic through residential neighborhoods, as opposed to the commercial district around M Street.[11] As a result, the D.C. Commissioners looked at fixing the existing bridge. To repair the bridge was deemed costly and temporary, however, since the existing structure required extensive alterations to accommodate traffic on the then-proposed Rock Creek and Potomac Parkway. The D.C. Commissioners then introduced, in the budget for 1926, legislation that would appropriate $250,000 for a new bridge at M Street:

> That in order to provide sufficient clearance for the proposed park drive in Rock Creek and Potomac Parkway, and to enable traffic to use M Street, N.W., between 26th and 27th Streets, N.W., the Commissioners of the District of Columbia be, and they are bereby, autborized and directed to construct a new steel-girder bridge to replace the bridge in the line of M Street over Rock Creek . . . *Provided*, that the Commission of Fine Arts shall be consulted as to the architectural design of the proposed bridge and its approaches.[12]

The bill was accompanied by a letter from the Board of Commissioners of the District of Columbia that outlines the legislation and includes detailed cost estimates, as well as justifying the commissioners' specification for a steel-girder rather than arch-type bridge:

> 1. Foundation conditions are sucb that the cost of an arcb bridge would greatly exceed the cost of a steel-girder bridge.
>
> 2. Provision for a park boulevard must be made, which will require a greater clearance than that wbicb could be provided by an arcb bridge unless the arch bridge be of very long span, wbicb would result in a greater increase in cost.
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> 3. The "Gunnite" treatment of the steel surfaces will give an improved appearance over the usual steel-girder structure, and would harmonize somewbat with tbe Pennsylvania Avenue Bridge over Rock Creek.[13]

The selection of a steel bridge to span Rock Creek conflicted with the ideas of park-bridge design as promulgated by the Commission of Fine Arts (CFA). Ironically, the Senate bill provided that erection of the proposed steel bridge be contingent upon consultation with the CFA. The introduction of such a bill resulted, not surprisingly, in a contentious relationship between the D.C. Commissioners and the CFA.

Following the introduction of the bill, it was sent to the Senate Committee on the District of Columbia for review. In a report to the Senate on May 21, 1926, the Committee on the District of Columbia reported favorably upon the bill and recommended it be passed. The committee stated that Congress' authorization of construction of a boulevard along the banks of Rock Creek necessitated, at the least, repairing the present M Street Bridge. The committee acknowledged that such an

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[11] Washington Post, March 13, 1926, p. 22.

[12] U.S., Congress, Senate, A Bill to Provide for the Construction of a Bridge to Replace the M Street Bridge Over Rock Creek in the District of Columbia, S3453, March 6, 1926.

[13] U.S., Congress, Senate, Committee on the District of Columbia, Replacement of the M Street Bridge Over Rock Creek in the District of Columbia, Report to Accompany S3453, 69th Cong., 1st Sess., 1926, Senate Report 898.

undertaking would require significant funds and, therefore, an entirely new bridge should instead be constructed. The report also said:

> The building of a new bridge would not only permit the parkway plan to be carried out, as authorized and appropriated by Congress, but would also make provision for carrying and supporting a 48" water main and other underground construction . . . .[14]

The bill was approved by both houses July 3, 1926, and became Public Law No. 69-487.

Correspondence between the city commissioners and the CFA from spring 1927 through fall 1928 reveals an increasingly strained relationship between the groups concerning the design for M Street Bridge. The first explicit evidence of the CFA's dissatisfaction occurs soon after the commissioners submitted the designs for a steel-girder bridge in April 1927--two years after the existing M Street Bridge had been closed, and almost one year since Congress had authorized a new bridge.

Having received the design by the D.C. engineer of bridges, a dissatisfied CFA Chairman Charles Moore requested that municipal architect Albert L. Harris produce a design for the span that conformed with existing park bridges. Unlike the flat-deck steel-girder type designed by the engineer, the bridge proposed by architect Harris was a concrete arch. Furthermore, the latter scheme placed the 48" water main under Rock Creek, instead of attaching it to the bridge structure. The CFA felt this design presented "marked improvements" over the sketches shown by the engineer of bridges.[15]

Municipal architect Harris's design met with little success. "The [D.C.] Commissioners do not see their way clear to embarking upon the construction of a bridge of radically different design . . .[16] Furthermore, they claimed, the cost of an arch bridge and of moving the water main would exceed the funds appropriated by Congress. In an effort to conform with the CFA design requirements, however, the D.C. Commissioners asserted that the steel-girder bridge was to be treated in an architectural manner: the girders would be encased in concrete and the piers, panels and balustrade would be given decorative treatment, as needed.

This attempt to appease the CFA backfired and, instead, inflamed Charles Moore. He responded to the D.C. Commissioners by asserting that, "plans for the M Street Bridge as submitted call for a brutal bridge, entirely inconsistent with any other parkway treatment." He continued to imply that the fundamental design was bad and "cannot be made good either by casing it in cement or by putting ornament, or anything of the kind, upon it."[17]

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[14] U.S., Congress, Senate, Committee on the District of Columbia, Replacement of the M Street Bridge Over Rock Creek in the District of Columbia, Report to Accompany S3453, 69th Cong., 1st Sess., 1926, Senate Report 898.

[15] Letter from Charles Moore, Chairman of the Fine Arts Commission, to the Board of Commissioners of the District of Columbia, September 20, 1927, M Street Bridge Project File, Commission of Fine Arts Records, Record Group 66, National Archives. These drawings could not be located.

[16] Letter from Mr. Dougherty, President, Board of Commissioners of the District of Columbia to Mr. Charles Moore, Chairman, Fine Arts Commission, November 14, 1927, M Street Bridge Project Files, Commission of Fine Arts Records, Record Group 66, National Archives.

[17] Letter from Charles Moore, Chairman of the Fine Arts Commission, to Mr. Dougherty, President, Board of Commissioners of the District of Columbia, November 23, 1927, M Street Bridge Project File, Commission of Fine Arts Records, Record Group 66, National Archives.

> The plans submitted are not suited to a park structure, and they cannot be made suitable, because the design is fundamentally bad. A bridge constructed along such lines would be a perpetual eyesore. This result is just what the congressional committee sought to avoid by requiring that the plans be submitted to the Commission of Fine Arts. Nothing remains, therefore, for the Commission to do, other than to report that the bridge should not be built according to the plans prepared . . . .[18]

Following its written critique of the engineer of bridges's preliminary plans, the CFA requested that the bridge not be built according to these plans, and that the municipal architect submit a new design.[19]

Despite the unresolved debate over appearance, the D.C. Commissioners prepared plans for a non-arched M Street Bridge. In March 1928, commissioners submitted final plans for this bridge to the CFA. Correspondence reveals that the city commissioners felt they had considered the CFA's criticisms without departing from the steel-girder bridge as defined in the law authorizing a new span. On March 10, 1928, almost two years after Congress had appropriated funds to construct the bridge, the CFA returned the plans to the D.C. Board of Commissioners along with its rejection of the design:

> The Commission of Fine Arts, having considered the plans submitted to the District engineer of bridges for a bridge over Rock Creek and Potomac Parkway at M Street, are returning the same with their disapproval of the plans as submitted. In the opinion of the Commission the bridge if constructed according to these plans would be a perpetual eyesore, conspicuous not only from the Pennsylvania Avenue Bridge, but especially so from the driveway extending from the Lincoln Memorial to Rock Creek Park, a driveway which forms an essential portion of the park system of the District of Columbia.[20]

The conflict between the two organizations contributed to the significant delay in construction. Finally, local citizens were desperate for a new bridge and were unwilling to wait any longer. Ten days after the CFA officially disapproved the existing plans, the West End Citizen's Association protested, emphasizing that if a bridge were not built within the year the city might lose the appropriation.[21]

Motivated by the public outcry, the city board of commissioners announced its intention to proceed with the project despite the CFA's objections.[22] It contended that the law required consultation with the CFA, but did not necessarily mandate gaining the CFA's approval. Support for the city commissioners' decision to go forward with the plans was granted by Chairman Simmons of

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[18] Minutes of the Commission of Fine Arts, 8 March 1928, pp. 11-12.

[19] Letter from Charles Moore to Mr. Dougherty, November 28, 1927, M Street Bridge Project File, Commission of Fine Arts, Record Group 66, National Archives.

[20] Letter from Charles Moore to Proctor L. Dougherty, President, Board of Commissioners, March 10, 1928, M Street Bridge Project Files, Commission of Fine Arts, Record Group 66, National Archives.

[21] "Bridge Delay Hit by Citizens' Body," [Washington] Evening Star, March 20, 1928.

[22] "May Build Bridge Despite Protest," [Washington] Evening Star, March 29, 1928.

the House Subcommittee on District Appropriations. He took issue with the CFA, and claimed the D.C. Commissioners were building just the type of bridge outlined in the authorization law. Simmons argued that the CFA was demanding a concrete arch bridge that, according to Congress, the city had no authority to build.

Simmons' testimony proved to be the stamp of approval needed to proceed. In August 1928, bids for the bridge's construction were solicited by the D.C. government. Farris Engineering Company of Pittsburgh, Pennsylvania, was selected November 9, 1928, to construct the new bridge, and by March the next year, excavation work had begun.[23] Even as the steel girders were being fitted, CFA Chairman Moore continued to express dissatisfaction with the M Street Bridge design, and the design of park bridges in general. He testified before the House Appropriations Subcommittee in 1930, "Where the District gets a chance to cross Rock Creek Park, where their roads go through, they are putting up ugly bridges, which are out of keeping with the other park bridges." Specifically lambasting M Street Bridge:

> The District Engineer of Bridges does not know what a park bridge is. The M Street Bridge is not a park bridge[,] it is an ugly service bridge of a type unfitted for park purposes. This steel girder bridge is not in accordance with the views of the commission; it is not in accordance with the views of Congress.[24]

A [Washington] Evening Star editorial of April 12, 1929, reflected upon the decision to move forward with construction of the bridge, urging that with a limited budget the engineers must sacrifice "beauty for unadorned utility." The newspaper also felt M Street Bridge would add favorably to the:

> . . . interesting contrast which marks the bridges now spanning Rock Creek. The old Calvert Street Bridge, with its ugly skeleton of steel work, remains as a companion to the Connecticut Avenue Bridge; the ramshackle P Street Bridge, by reason of its proximity to the Q Street Bridge, teaches an interesting lesson in the old and new bridge building, while the M Street Bridge, another structure of steel[,] will carry out the same thought in its relation to the Pennsylvania Avenue Bridge, a stone's throw away.[25]

Despite the CFA's criticism of applied ornament, the D.C. Commissioners followed through on its plans for embellishing the structure, in deference to other Rock Creek and Potomac Park bridges. M Street Bridge was officially opened at a public dedication ceremony held May 15, 1930.[26]

The construction of M Street Bridge, according to wording by the D.C. Commissioners and enacted as law by Congress, questions the effectiveness of the legal provision for consultation with the CFA on bridge design. It appears that city commissioners had determined the appearance of the bridge in advance of receiving congressional funding, and had little intention of utilizing counsel supplied by the CFA. As erected, the bridge fails to conform to the architecture of other Rock Creek

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[23] "Work Under Way on New M Street Bridge," [Washington] Evening Star, March 11, 1929.

[24] "Rock Creek Park Bridges Held Ugly," [Washington] Evening Star, January 16, 1929, p. 13.

[25] "Washington's Bridges" editorial, [Washington] Evening Star, April 12, 1929, p. 8.

[26] "M Street Bridge Dedication Held," [Washington] Evening Star, May 15, 1930.

bridges except in its use of concrete.

An examination of other park and parkway crossing bridges built before and after that for M Street, reveals that the CFA's attitude toward park-bridge design was not new, nor did it change following the bridge's construction. In 1913, at least a dozen years before the M Street span became an issue, Congress had authorized funds for a new Pennsylvania Avenue Bridge across the parkway. The CFA rejected a design for a girder structure such as would be proposed for M Street, and suggested an arched bridge akin to Connecticut Avenue/Taft Bridge.[27] In a compromise solution, a new arched bridge faced with stone was built around the water mains of the old Aqueduct Bridge.

In 1935, five years after the construction of M Street Bridge, P Street Bridge was erected under similar circumstances. Here, however, the P Street span was designed cooperatively by the Office of Municipal Architect and the D.C. Bridge Division in consultation with the CFA. As a result of a less-acrimonious architect-engineer-planning relationship, the stone double-arched P Street Bridge conforms to the CFA's design standards for park-bridge design.

Since 1930, M Street Bridge has served as a major artery from downtown Washington through Georgetown, and westward into Virginia and north along Canal Road into Maryland. Vehicular traffic in the vicinity of the bridge increased in the 1980s with the transformation of the West End area into a hotel, office and restaurant hub, in tandem with the increased popularity of commercial Georgetown.

Description

The existing three-span M Street Bridge was designed by David V. McComb, D.C. engineer of bridges, who supervised its design and construction. Farris Engineering Company of Pittsburgh, Pennsylvania, built it for $185,475. The 308' long bridge provides four lanes within its 40' width; it carries two-way M Street traffic between 26th Street east of Rock Creek, and 28th Street west of the creek in Georgetown.

The superstructure is supported by two concrete abutments and two concrete piers; the piers flank the creek, separating it from the parkway on the west, and the valley hillside on the east. Three equally spaced steel girders rest on concrete supports. Interspersed between the girders are four bays of steel I-beams that help support the concrete roadbed. Cradled by a metal hangar suspended from two I-beams is a large metal water pipe and wood planks that form a catwalk. The pipe, catwalk, and hangar are visible only from directly beneath the bridge.

Similar in design and detail, the two elliptical-shaped piers and the abutments have large rusticated bases. The overall pier is 72' long and 7' wide, located about 29' from the base of the footing to the roadway surface. Steel beams lightly reinforce the concrete; these beams were structural members of the truss system of the previous bridge at this site. The two concrete piers are founded on piles ca. 30' deep; it is about 33' from the base of the footing to the top of the girder seat. The massing of the pier is relieved by two rectangular recesses containing arched openings, which are articulated by voussoirs. The piers are also incised with short, narrow recessed openings set approximately 5' off the ground, which recall the embrasures found in military battlements or fortified architecture.

The abutments, composed of boulder concrete and founded on rock, are styled similar to the piers, with blind arched openings. Near the top of the west hill (and abutting the present abutment) are remnants of the stone abutment from the 1871 M Street Bridge.

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[27] Myer, p. 59.

The superstructure's three simple spans feature deck girders spaced every 25', with floorbeams connected between the girders. The existing girders consist of steel plates with angles rivetted for flanges; the girder is ca. 78' long x ca. 8' deep. The outside face of the exterior girders are encased in concrete. The floorbeams are riveted to the girders, and the stringers to the floorbeams.

Resting on the stringers and girders is a 9-1/2" concrete slab and a 4-1/2" concrete sidewalk. The upper deck is a concrete slab covered with asphalt and flanked by narrow brick drainage shoulders. Cantilevered sidewalks 8' wide flank the roadway and rise about 8" above the roadbed. The sidewalks are cantilevered over the girders, supported on simple concrete brackets that line up over inset panels.

Along the outside of the sidewalk is an ornamental concrete parapet with decorative, circular balusters evenly spaced between the parapet posts. An open-rail concrete balustrade encloses the bridge deck on both sides. The balustrade is composed of a rhythmic series of thirty bays, each made up of five concrete balusters, separated by concrete piers.

Anchored to the tenth and thirtieth bays, and the termini, are more substantial, concrete pedestals carrying lampposts. The pedestals of the eight heavy, iron Millet lampposts--one of two most widely used types of light standards in the District--feature recessed panels.

The facade of M Street Bridge as seen from Rock Creek and Potomac Parkway below, reveals the classicizing details incorporated to beautify an essentially utilitarian structure. Large concrete brackets supporting the cantilever divide the girder wall into a series of bays reminiscent of an architrave; the continuous beam above the brackets, corresponding with the roadbed, forms the frieze. Incised with striations, the beam further implies the alternating metope and triglyph found on friezes of the Doric order.

The bridge was last treated in 1962 with a lead-based paint. The connections for the utilities appear to be in poor condition. Despite the effects of time and the poor condition of the bridge surfaces, few alterations have impaired the original design.

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ADDENDUM TO:
M STREET BRIDGE
Rock Creek Park
Spanning Rock Creek & Potomac Parkway
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